CHP Tackled Y2K Issues Early

When 12:01 a.m. of the year 2000 rolls around, the CHP expects to be on the highway conducting business as usual, not handling computer problems.

The CHP has spent three years preparing for the new century and ironing out any possible glitches that might snarl the works of its 54 centralized computer systems. Many computer systems face problems due to an old method they use to store the date.

Systems that calculate age, sort or compare dates, allow for leap year or designate a century must be scrutinized to assure they will operate smoothly when the calendar flips over at the end of the year.

"We're going to be ready," said Robert Metzker, commander of the Administrative Applications Section of the Information Management Division (IMD).

Since 1996, the Year 2000 (Y2K) Project has involved more than 30 IMD staffers plus contract employees at various phases, Metzker said. Senior staffers familiar with COBOL, an early computer language, have been in great demand because the most serious problems are centered in old computer systems. "The people coming out of school today don't learn COBOL," Metzker said.

The CHP's first step in developing its Y2K strategy, Metzker said, was surveying the CHP's information technology inventory, both the systems developed in-house by IMD and those supplied by outside vendors.

IMD then coordinated with vendors to fix vendor-generated systems and divided its in-house systems into two categories, those that would be modified and those that wouldn't.

The most intense work focused on the CHP's six mission-critical systems, all involving safety of officers or the public.

The six critical systems included:

- Computer Aided Dispatch (CAD) which allows communications operators to dispatch officers to accident and crime scenes
- Management Information System (MIS), the CHP's internal communications network
- Hospitalized/Incarcerated Database that provides information on persons transported to the hospital or escorted to jail by officers in the field
- Management Information System of Terminal Evaluation Records (MISTER), which tracks the repair records of trucks inspected at company terminals. Locating a truck in the system can assist officers in determining if a truck on the road is carrying hazardous material
- Air Operations Parts and Maintenance Database keeps CHP aircraft in top condition
- Timekeeping and Attendance System maintains a roster of all officers, providing information on available officers in case of an emergency.

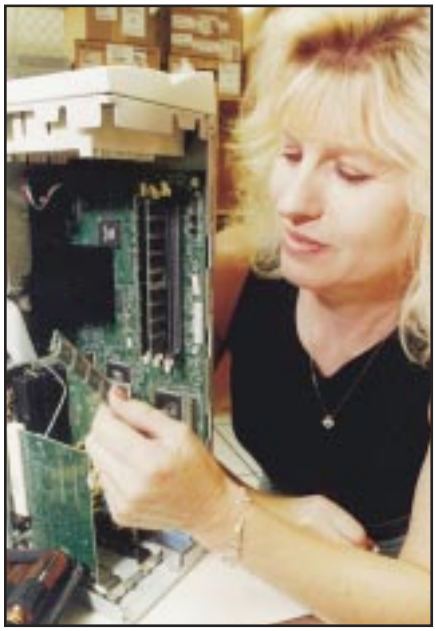
More than a year before the deadline, IMD used a software tool called Hourglass to test the six systems. All of them passed. For a fail-safe test, IMD also sent the six systems through the "Time Machine" on the state's mainframe computer at the Teale Data Center.

In addition, to the six critical systems, IMD is responsible for 48 other centralized but less vital systems, some of which are composed of dozens

of software programs. All must be tested to insure the date storage problem is not hidden in the system. Examples of these systems include the Statewide Integrated Traffic Records System (SWITRS), the Fleet Management Information System and the warehouse management system.

"We started out with just the 54 systems," said Bill Worden, the CHP's current Y2K project manager, "but now we are inventorying anything that might have an embedded microchip in it. Embedded chips are a common component of equipment today."

An embedded chip is a silicone chip installed physically in a piece of equipment that controls its operation. CHP equipment that might typically have an embedded chip is primarily handled by the Telecommunications or Facilities Sections and includes elevators, fuel pumps, radios, telephones and air conditioners.



BECKY BOARDMAN of the Information Management Division's Network Management Section installs memory in a computer.

IMD and the commands where equipment is located will assess what the damage might be if a failure did occur and set up a priority list for replacing embedded chips.

Another task undertaken by the Y2K Project is gathering information on the 6,400 desktop computer workstations in the Department operated by 266 servers.

IMD is confident it will be ready. "We've surveyed 800,000 lines of code, which are the computer's instructions. That's the equivalent of tracing ancestry through a 16,000-page genealogy book," Metzker said.